UNICORN™ Service Tool

User Manual

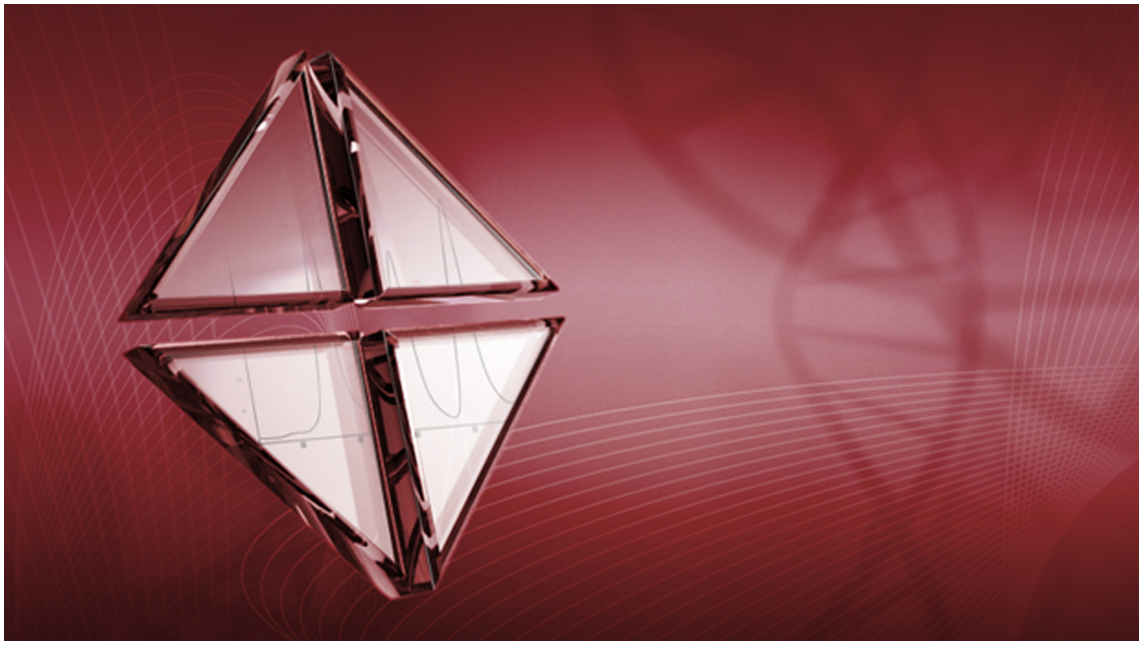


Table of Contents

1 Introduction 3
2 UNICORN Installation tab 5
3 Instrument Connection tab 6
4 Database Server Connection tab 9
5 License Server Connection tab 10
6 Create System Report tab 11
7 Process Status tab 12
8 Port check tab 13
9 Computer HW/SW check tab 17
10 History Log tab 18
11 About tab 19

1 Introduction

Introduction to the UNICORN Service Tool

The UNICORN Service Tool is used to troubleshoot and set parameters in an existing UNICORN installation. It can also be used to make sure that the operating system environment is properly set up prior to installing UNICORN.

With the software you can:

- See a list of installed UNICORN components.
- Test connection to an instrument.
- Test connection to a database server
- Test connection to a license server
- Manage processes needed by UNICORN
- Test communication ports
- Check if the computer and operating system settings fulfills the UNICORN specifications
- See a log of all events registered by the UNICORN Service Tool.

Typographical conventions

Menu commands, field names and other text items from the software are quoted exactly as they appear on the screen, in a bold italic typeface:

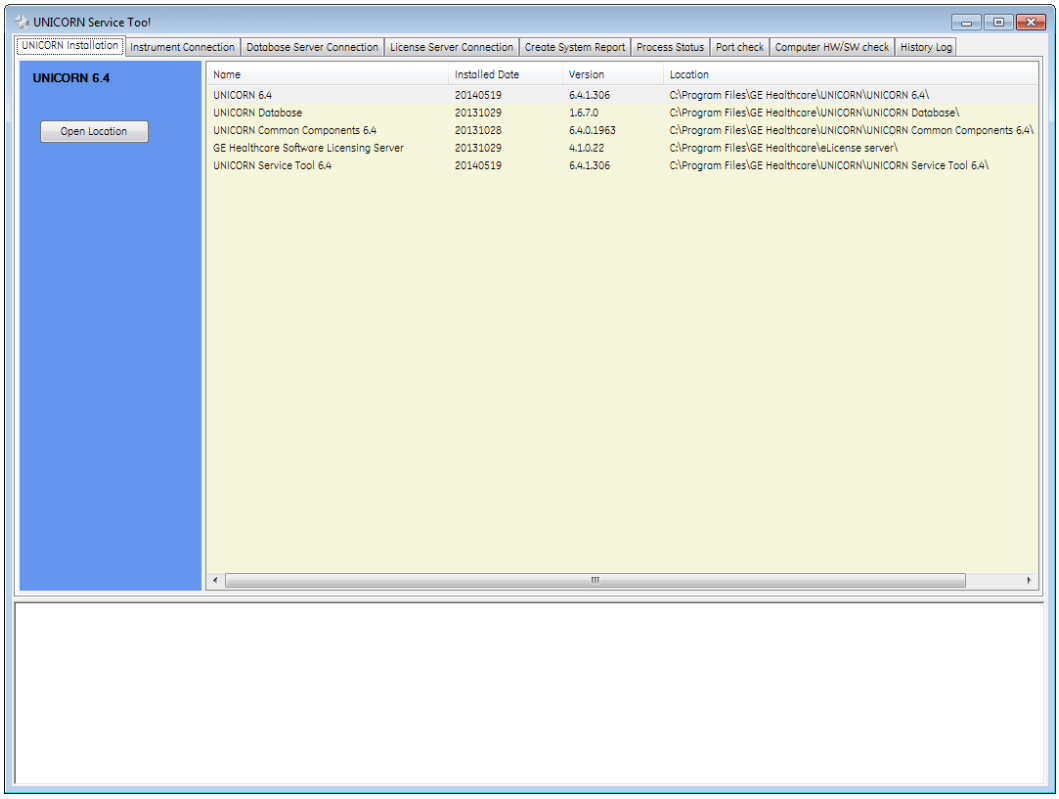
Example: ***Port check*** tab

Start the UNICORN Service Tool

Step	Action
1	Click the Windows ***Start*** button.
2	Type `UNICORN Service Tool` in the ***Start*** menu search field.
3	Click the ***UNICORN Service Tool*** item that is displayed as the search result to start the program.

The UNICORN Service Tool user interface

The different functions of the UNICORN Service Tool are accessed by clicking the tabs of the UNICORN Service Tool window. There is a status pane in the lower part of the window.



2 UNICORN Installation tab

Introduction

Click the ***UNICORN Installation*** tab to see a list of installed UNICORN components.

Copy the list of installed UNICORN components

Step	Action
1	Right-click an item in the list.
2	Click: • ***Copy*** to copy the selected rows to the Clipboard. • ***Copy table*** to copy the entire list to the Clipboard.

Open an installation folder of a UNICORN component

Step	Action
1	Select an item in the list.
2	Click ***Open location***. *Result:* The installation folder of the selected item opens.

3 Instrument Connection tab

Introduction

Click the ***Instrument Connection*** tab to configure UNICORN to connect to an instrument using a selected network adapter.

Search for a connected instrument

Step	Action
1	Select the network adapter that is connected to an instrument in the ***Select network adapter*** list.
2	Click ***Search for Instruments*** to search for instruments connected to the selected network adapter. *Result*: Connected instruments are listed in the ***Found instruments*** list.

Copy the list of connected instruments

Step	Action
1	Right-click an item in the list.
2	Click: • ***Copy*** to copy the selected rows to the Clipboard. • ***Copy table*** to copy the entire list to the Clipboard.

Configure UNICORN

Note: *If two or more network adapters are in use, make sure that the configured IP address is not within the subnet of the other adapters. Recommended IP address to use is either 10.1.1.X or 192.168.1.X where X is 2 to 255.*

Step	Action
1	Select the network adapter that is connected to an instrument in the ***Select network adapter*** list.
2	Click ***Configure UNICORN*** to configure UNICORN to use the selected network adapter.

Configure instrument connection timeout

If the connected instrument keeps losing connection you may try to configure the timeout period.

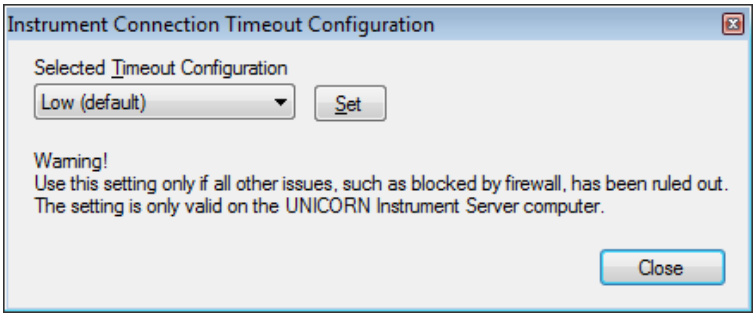
Note: *Use higher timeout values for troubleshooting only. The default value is the only recommended setting. Higher timeout values may result in delayed display of events and response to commands.*

Note: *Change this setting only if all other issues, such as incorrectly setup firewall, has been ruled out.*

Note: *The settings are only valid on the UNICORN Instrument Server computer and with the following instrument configurations:*

- *ÄKTA avant 25 3.0 or later*
- *ÄKTA avant 150 2.0 or later*
- *ÄKTA pure 25 1.6 or later*
- *ÄKTA pure 150 1.4 or later*

Value	Timeout period (s)
Low (default)	2
Medium	15
High	30

Step	Action
1	In the left pane of the ***Instrument Connection*** tab, click ***Configure***. *Result:* The ***Instrument Connection Timeout Configuration*** dialog box opens. 
2	In the ***Selected Timeout Configuration*** list, select ***Medium***, then click ***Set***.
3	Restart the UNICORN Instrument Server.
4	If the ***Medium*** setting does not resolve the issue, select the ***High*** setting.

Tip: *If a higher timeout value resolves the issue it may be an indicator for an unstable network.*

4 Database Server Connection tab

Introduction

Click the ***Database Server Connection*** tab to search for UNICORN databases and configure UNICORN.

Search for UNICORN databases

Click ***Search for UNICORN databases*** to search for UNICORN databases on the network.

Result: Found databases are listed in the field below the button. The lists ***Select database location*** and ***Select database name*** are populated with found database locations and database names.

Test database connection

Click ***Test Database Connection*** to test the connection to the selected database.

Result: If the database connection is successful, the icon to the right of the ***Test Database Connection*** button will become green and the lower status pane will be updated with the result of the test.

Configure UNICORN

Step	Action
1	Select a database location in the ***Select database location*** list or enter the computer name where the database is located.
2	Select or enter a database name in the ***Select database name*** list.
3	Click ***Configure UNICORN*** to configure UNICORN to use the selected database.

5 License Server Connection tab

Introduction

Click ***License Server Connection*** to search for a license server and configure UNICORN.

Search for license server

Click ***Search for Licenses*** to search for licenses on the selected computer and on the localhost.

Result: Found licenses are listed in the ***Found licenses*** field.

Open license file location

There are two folders where the license files are stored.

- Click the upper ***Open Location*** button to open the folder where the node locked license files are stored.
- Click the lower ***Open Location*** button to the folder where the concurrent license files are stored.

Configure UNICORN

Step	Action
1	Select a computer name in the ***Select or enter computer name*** list or enter the computer name where the license server is running.
2	Click ***Configure UNICORN*** to configure UNICORN to use the license server running on the selected computer. ***Note:*** *Any node locked license on the localhost is always available in UNICORN.*

6 Create System Report tab

Introduction

Click the ***Create System Report*** tab to create a system report including the current UNICORN configuration settings. This can be used to troubleshoot the UNICORN installation.

Create System Report

Step	Action
1	Type a description of the problem you are experiencing in the text field.
2	Click ***Create System Report***. *Result:* The program starts to collect information about your current operating system and UNICORN configuration. This may take a few minutes. When the report file archive is created the ***Save System Report As*** dialog opens.
3	Click ***Save*** to save the system report file archive.

7 Process Status tab

Introduction

Click the ***Process Status*** tab to see a list of all UNICORN related processes. The processes can be started, stopped and registered and unregistered in the Windows registry.

Note: *Not all operations are available for all processes.*

Manage processes

Step	Action
1	Select a process in the list.
2	Click ***Start***, ***Stop***, ***Register*** or ***Unregister***. The available buttons depend on the process and the status of the process. *Result:* The process ***Status*** changes and the lower pane is updated.

Note: *The process named **UNICORN** can not be stopped from the UNICORN Service Tool. Exit UNICORN to stop the process.*

8 Port check tab

Introduction

The port check is intended for checking if it is possible to communicate on ports used in a UNICORN network installation. The port check verifies that computers in the network can communicate using the selected ports.

The port check can also be done locally on a single computer. That is, the port check is set up as both client and server on the local computer. This verifies that local ports can be used on the computer.

The Port check tab

Click the ***Port check*** tab to see a list of ports used by UNICORN and to test the connectivity of the ports.

See *UNICORN Administration and Technical Manual* for more information on ports used by UNICORN.

Test IP address

Before checking ports you can check that there is a connection between the client and the server computer. The port checks can not succeed if there is no connection between the client and the server computer.

Step	Action
1	Click the ***Client*** tab.
2	Click the network adapter you want to test in the ***Select adapter to use*** list.
3	• Enter the server computer name in the ***Name of computer acting server*** field or select a server from the list and/or • enter the IP address in the ***IP address of computer acting server***.
4	Click ***Ping*** to test the IP address. *Result:* The status pane will be updated with the result of the test. *Result:* If the IP address test is successful, the icon to the right of the ***IP address of computer acting server*** field button will become green and the lower status pane will be updated with the result of the test.

Test client and server ports

The stages of a port check is described in the following list. If the server and client are on different computers the check must be run on both computers simultaneously.

Step	Action
1	Click the ***Server*** tab.
2	Click the network adapter connected to the client computer in the ***Select adapter to use*** list.
3	Select the ports to test by selecting the check boxes in the ***Select server ports to test*** field.
4	Click ***Start port check***.
5	Click the ***Client*** tab.
6	Click the network adapter connected to the server computer in the ***Select adapter to use*** list.
7	Select the same ports that were selected on the ***Server*** tab by selecting the check boxes in the ***Select server ports to test*** field.
8	Click ***Start port check***. *Result:* The ***Status*** field is updated according to connection status and the lower pane will be updated with the result of the test. ***Note:*** *If the software asks you to stop a running service when performing a port check, stop the service in the* ***Process Status*** *tab and then click* ***Start port check*** *again.*

Port check example

Different computers may have different roles in the network. For example the UNICORN Software may be installed on one computer, the Database server on another and License Server on a third computer.

In the following example the Database Server is installed on one computer and the UNICORN Software is installed on a different computer.

Start port check on the server computer

Step	Action
1	Start the UNICORN Service Tool on the Database server computer.

Step	Action
2	Click the ***Port check*** tab.
3	Click the ***Server*** tab.
4	Click the network adapter connected to the client computer in the ***Select adapter to use*** list. *Result:* The Name of computer acting as server and IP address of computer acting as server fields are populated with the Database server information Copy this information for use in the client computer.
5	Select ***SQL database*** in the left list. *Result:* The right-hand list is populated with information on the ports and process needed for the ***SQL database***.
6	Click ***Start port check***.
7	Wait for the processes to start and the ***Status*** change to ***Server:OK***

Start port check on the client computer

Step	Action
1	Start the UNICORN Service Tool on the UNICORN Software computer.
2	Click the ***Port check*** tab.
3	Click the ***Client*** tab.
4	Click the network adapter connected to the server computer in the ***Select adapter to use*** list.
5	• Enter the server computer name in the ***Name of computer acting server*** field or select a server from the list and/or • enter the IP address in the ***IP address of computer acting server***. ***Note:*** *Copy the computer name and IP address from the server computer.*

Step	Action
6	Click ***Ping*** to test the IP address. ***Note:*** *The port checks only succeed if there is a connection between the client computer and the server computer.* *Result:* The status pane will be updated with the result of the test. Continue to the next step if the ping test result is successful.
7	Select ***SQL database*** in the left-hand list. *Result:* The right-hand list is populated with information on the ports used by the ***SQL database***.
8	Click ***Start port check***.
9	Wait for the processes to start and for the ***Status*** to change to ***Client:OK***. ***Note:*** *If the port is not available the client side will show* ***Client:Error****. If, during the the port check, the port becomes available the* ***Status*** *will change to* ***Client:OK****.*
10	Click ***Stop*** to stop the port check.
11	Click ***Stop*** in the ***Port check*** tab on the server computer to stop the port check.

9 Computer HW/SW check tab

Introduction

Click the ***Computer HW/SW check*** tab to see lists of operating system and computer hardware recommendations and requirements. There are three different lists, one list for each installation type. The full UNICORN installation requirements are checked by selecting all three lists.

- UNICORN Software
- Database Server
- License Server

Check installation recommendations

Select the check box for an installation type.

Note: *Select **Full installation** to check all three installation lists.*

Result: The right-hand list is populated with the recommendations for the selected installation type. The UNICORN Service Tool will check the current computer specifications against the requirements and advice user action if needed.

List of recommendations and specifications

The ***Status*** field for each list item shows ***OK*** or ***Warning*** if the recommendation is fulfilled or not respectively. See the ***Information*** and ***Specification*** fields for more information.

Note: *The list is updated when the installation type check box is selected. Clear and select the check box to update the list.*

10 History Log tab

Introduction

Click the ***History Log*** tab to see all events registered by the UNICORN Service Tool.

Use the History Log filter

Use the History Log filter to easier find UNICORN Service Tool events.

Step	Action
1	Select the ***Use Filter*** check box. *Result:* Four more lists will be available.
2	Click ***Level*** and select or clear the types of ***Level*** events to filter by.
3	Click ***Category*** and select or clear the types of ***Category*** events to filter by.
4	Click ***Start time*** to filter by events after a specific date and time.
5	Click ***End time*** to filter by events before a specific date and time.

11 About tab

The About tab

Click the ***About*** tab to see detailed information on the UNICORN Service Tool. Access this manual by clicking ***Show Help***.

Note: *This manual is also accessible by pressing **F1** in any tab.*

For local office contact information, visit
www.gelifesciences.com/contact

GE Healthcare Bio-Sciences AB
Björkgatan 30
751 84 Uppsala
Sweden

www.gelifesciences.com/unicorn

GE and GE monogram are trademarks of General Electric Company.

UNICORN is a trademark of General Electric Company or one of its subsidiaries.

All other third party trademarks are the property of their respective owner.

Any use of UNICORN is subject to GE Healthcare Standard Software End-User License Agreement for Life Sciences Software Products. A copy of this Standard Software End-User License Agreement is available on request.

© 2014-2015 General Electric Company – All rights reserved. First published Jun 2014

All goods and services are sold subject to the terms and conditions of sale of the company within GE Healthcare which supplies them. A copy of these terms and conditions is available on request. Contact your local GE Healthcare representative for the most current information.

GE Healthcare Europe GmbH
Munzinger Strasse 5, D-79111 Freiburg, Germany

GE Healthcare UK Limited
Amersham Place, Little Chalfont, Buckinghamshire, HP7 9NA, UK

GE Healthcare Bio-Sciences Corp.
800 Centennial Avenue, P.O. Box 1327, Piscataway, NJ 08855-1327, USA

GE Healthcare Japan Corporation
Sanken Bldg. 3-25-1, Hyakunincho Shinjuku-ku, Tokyo 169-0073, Japan

29109881 AB 10/2015 a139